

# Notice of Allowability

Application No.

10/056,309

Examiner

Phuoc H. Nguyen

Applicant(s)

ABIDI ET AL.

Art Unit

2143

## -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to October 3, 2005 and Interviewed on December 20, 2005.
2. ☒ The allowed claim(s) is/are 1,3-13 and 15-33.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).
  - \* Certified copies not received: \_\_\_\_\_.


Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

### Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),  
Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit  
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),  
Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

  
**JEFFREY PWU**  
**PRIMARY EXAMINER**

### EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Daniel Ledesma (Reg. No. 57,181) on December 20, 2005.

Claims have been amended as follow:

Please cancelled claims 2, 14, and amended claims 1, 13, 19, and 25-33 as follows:

1. (currently amended) A method of managing network devices by specifying device components using a parsable string that conforms to a specified grammar, the method comprising the computer steps of:  
creating and storing one or more entity location specifier values each comprising one or more location elements;  
wherein the one or more entity location specifier values are specified as parsable strings;  
wherein the parsable strings conform to the specified grammar;  
wherein the specified grammar defines one or more delimited location specifiers, wherein each location specifier specifies a location type and a number;  
wherein the parsable strings are stored in Managed Information Base (MIB) objects and wherein the one or more entity location specifier values are specified as the parsable strings in the MIB objects;  
wherein each of the one or more location elements is selected from a superset of location elements that specify locations of entities within one or more network devices;

receiving from an application a retrieval request for a particular entity location specifier value; and  
transmitting the particular entity location specifier value to the application.

13. (currently amended) A method of managing network devices by specifying device components using a parsable string that conforms to a specified grammar to provide platform independent management, the method comprising the computer-implemented steps of:
- issuing a retrieval request for a particular entity location specifier value to an agent on a network device;
  - wherein the particular entity location specifier value is specified as the parsable string;
  - wherein the particular entity location specifier value comprises one or more location elements;
  - wherein the parsable string conforms to the specified grammar;
  - wherein the specified grammar defines one or more delimited location specifiers,
  - wherein each location specifier specifies a location type and a number;
  - wherein the parsable strings are stored in Managed Information Base (MIB) objects and wherein the one or more entity location specifier values are specified as the parsable strings in the MIB objects;
  - wherein each of the one or more location elements is selected from a superset of location elements that specify locations of all entities within one or more network devices;
  - receiving the particular entity location specifier value; and
  - processing the particular entity location specifier value to determine a location of an entity.
19. (currently amended) A method as recited in Claim 13 wherein the specified grammar is compatible with ~~CLI~~ Command Line Interpreter.

25. (currently amended) A computer-readable medium carrying a data structure used in managing network devices by specifying device components using a parsable string that conforms to a specified grammar to provide platform independent management, comprising:
- a location specifier value comprising one or more location elements;
    - wherein the grammar defines one or more delimited location specifiers, wherein
    - each location specifier specifies a location type and a number;
    - wherein the parsable strings are stored in Managed Information Base (MIB)
    - objects and wherein the one or more entity location specifier values are
    - specified as the parsable strings in the MIB objects;
  - wherein the location specifier value is specified as the parsable string that conforms to the specified grammar;
  - ~~wherein the location specifier value is in a MIB object;~~
  - wherein the one or more location elements are selected from a superset of location elements that specify locations of all entities within one or more network devices; and
  - wherein the parsable string can be retrieved from the MIB object with a retrieval request.
26. (currently amended) A computer-readable medium carrying one or more sequences of instructions for managing network devices by specifying device components using a parsable string that conforms to a specified grammar to provide platform independent management, which instructions, when executed by one or more processors, cause the one or more processors to carry out the steps of:
- creating and storing one or more entity location specifier values each comprising one or more location elements;
  - wherein the one or more entity location specifier values are specified as parsable strings;
  - wherein the parsable strings conform to the specified grammar;

wherein the specified grammar defines one or more delimited location specifiers,  
wherein each location specifier specifies a location type and a number;  
wherein the parsable strings are stored in Managed Information Base (MIB)  
objects and wherein the one or more entity location specifier values are  
specified as the parsable strings in the MIB objects;  
wherein each of the one or more location elements is selected from a superset of  
location elements that specify locations of all entities within one or more  
devices;  
receiving from an application a retrieval request for a particular entity location specifier  
value; and  
transmitting the particular entity location specifier value to the application.

27. (currently amended) A computer-readable medium carrying one or more sequences of instructions for managing network devices by specifying device components using a parsable string that conforms to a specified grammar to provide platform independent management, when executed by one or more processors, cause the one or more processors to carry out the steps of:
- issuing a retrieval request for a particular entity location specifier value to an agent on a network device;
- wherein the particular entity location specifier value is specified as the parsable string;
- wherein the particular entity location specifier value comprises one or more location elements;
- wherein the parsable string conforms to the specified grammar;
- wherein the specified grammar defines one or more delimited location specifiers,  
wherein each location specifier specifies a location type and a number;  
wherein the parsable strings are stored in Managed Information Base (MIB)  
objects and wherein the one or more entity location specifier values are  
specified as the parsable strings in the MIB objects;

wherein each of the one or more location elements is selected from a superset of location elements that specify locations of all entities within one or more network devices;  
receiving the particular entity location specifier value; and  
processing the particular entity location specifier value to determine a location of an entity.

28. (currently amended) An apparatus for managing network devices by specifying device components using a parsable string that conforms to a specified grammar to provide platform independent management, comprising:  
means for creating and storing one or more entity location specifier values each comprising one or more location elements;  
wherein the one or more entity location specifier values are specified as parsable strings;  
wherein the parsable strings conform to the specified grammar;  
wherein the specified grammar defines one or more delimited location specifiers,  
wherein each location specifier specifies a location type and a number;  
wherein the parsable strings are stored in Managed Information Base (MIB) objects and wherein the one or more entity location specifier values are specified as the parsable strings in the MIB objects;  
wherein each of the one or more location elements is selected from a superset of location elements that specify locations of all entities within one or more network devices;  
means for receiving from an application a retrieval request for a particular entity location specifier value; and  
means for transmitting the particular entity location specifier value to the application.
29. (currently amended) An apparatus for managing network devices by specifying device components using a parsable string that conforms to a specified grammar to provide platform independent management, comprising:

a network interface that is coupled to a data network for receiving one or more packet flows therefrom;

a processor;

one or more stored sequences of instructions which, when executed by the processor, cause the processor to carry out the steps of:

creating and storing one or more entity location specifier values each comprising one or more location elements;

wherein the one or more entity location specifier values are specified as parsable strings;

wherein the parsable strings conform to the specified grammar;

wherein the specified grammar defines one or more delimited location specifiers,

wherein each location specifier specifies a location type and a number;

wherein the parsable strings are stored in Managed Information Base (MIB)

objects and wherein the one or more entity location specifier values are

specified as the parsable strings in the MIB objects;

wherein each of the one or more location elements is selected from a superset of location elements that specify locations of all entities within one or more network devices;

receiving from an application a retrieval request for a particular entity location specifier value; and

transmitting the particular entity location specifier value to the application.

30. (currently amended) An apparatus for managing network devices by specifying device components using a parsable string that conforms to a specified grammar to provide platform independent management, comprising:
- means for issuing a retrieval request for a particular entity location specifier value to an agent on a network device;
- wherein the particular entity location specifier value is specified as the parsable string;

wherein the particular entity location specifier value comprises one or more location elements;

wherein the parsable string conforms to the specified grammar;

wherein the specified grammar defines one or more delimited location specifiers,

wherein each location specifier specifies a location type and a number;

wherein the parsable strings are stored in Managed Information Base (MIB)

objects and wherein the one or more entity location specifier values are

specified as the parsable strings in the MIB objects;

wherein each of the one or more location elements is selected from a superset of location elements that specify locations of all entities within one or more network devices;

means for receiving the particular entity location specifier value; and

means for processing the particular entity location specifier value to determine a location of an entity.

31. (currently amended) An apparatus for managing network devices by specifying device components using a parsable string that conforms to a specified grammar to provide platform independent management, comprising:

a network interface that is coupled to a data network for receiving one or more packet flows therefrom;

a processor;

one or more stored sequences of instructions which, when executed by the processor, cause the processor to carry out the steps of:

issuing a retrieval request for a particular entity location specifier value to an agent on a network device;

wherein the particular entity location specifier value is specified as the parsable string;

wherein the particular entity location specifier value comprises one or more location elements;

wherein the parsable string conforms to the specified grammar;



wherein the specified grammar defines one or more delimited location specifiers,  
wherein each location specifier specifies a location type and a number;  
wherein the parsable strings are stored in Managed Information Base (MIB)  
objects and wherein the one or more entity location specifier values are  
specified as the parsable strings in the MIB objects;  
wherein each of the one or more location elements is selected from a superset of  
location elements that specify locations of all entities within one or more  
network devices;  
receiving the particular entity location specifier value; and  
processing the particular entity location specifier value to determine a location of an  
entity.

32. (currently amended) A method of managing network devices by specifying device components using a parsable string that conforms to a specified grammar to provide platform independent management, the method comprising the computer steps of:  
creating and storing one or more entity location specifier values each comprising one or more location elements;  
wherein the one or more location elements are for logical entities and physical entities;  
wherein the one or more entity location specifier values are specified as parsable strings in ~~MIB~~ Managed Information Base (MIB) objects;  
wherein the parsable strings conform to ~~ABNF~~ Augmented Backus-Naur Form (ABNF);  
wherein the specified grammar defines one or more delimited location specifiers,  
wherein each location specifier specifies a location type and a number;  
wherein each of the one or more location elements is selected from a superset of location elements that specify locations of all entities within one or more network devices;  
receiving from an application a single retrieval request for a particular entity location specifier value; and

transmitting the particular entity location specifier value to the application in a single response.

33. (currently amended) A method of managing network devices by specifying device components using a parsable string that conforms to a specified grammar to provide platform independent management, the method comprising the computer-implemented steps of:
- issuing a single retrieval request for a particular entity location specifier value to an agent on a network device;
  - wherein the particular entity location specifier value is specified as the parsable string;
  - wherein the particular entity location specifier value comprises one or more location elements;
  - wherein the one or more location elements are for logical entities and physical entities;
  - wherein the parsable string conforms to ~~ABNF~~ Augmented Backus-Naur Form (ABNF);
  - wherein the specified grammar defines one or more delimited location specifiers,
  - wherein each location specifier specifies a location type and a number;
  - wherein the parsable strings are stored in Managed Information Base (MIB)
  - objects and wherein the one or more entity location specifier values are specified as the parsable strings in the MIB objects;
  - wherein each of the one or more location elements is selected from a superset of location elements that specify locations of all entities within one or more network devices;
- receiving the particular entity location specifier value in a single response; and  
processing the particular entity location specifier value to determine a location of an entity.

*Examiner's Statement of Reasons for Allowance*

2. This office action is in response to the application filed on October 3, 2005 and an interviewed on December 20, 2005.
3. Applicant amended claims 1, 13, 19, and 25-33, cancelled claims 2, and 14.
4. Claims 1, 3-13, and 15-33 are allowed
5. Claims include limitations that the prior art of record does not appear to teach or render obvious the claimed limitations as recited below.
6. The following is a statement of reasons for the indication of allowable subject matter:

The prior art of records fails to disclose the specified grammar defines one or more delimited location specifiers, wherein each location specifier specifies a location type and a number; wherein the parsable strings are stored in Managed Information Base (MIB) objects and wherein the one or more entity location specifier values are specified as the parsable strings in the MIB objects.

The closest found prior art is Kekic et al. U.S. Patent 6,664,978. Kekic discloses a client-server network management system capable of represent the status and state of the component through the user graphical interface, and by using the network management agent and an element manager object to manage operation of at least one managed computer network element. However, Kekic fails to teach the specified grammar defines one or more delimited location specifiers, wherein each location specifier specifies a location type and a number; wherein the parsable strings are stored in Managed Information Base (MIB) objects and wherein the one or more entity location specifier values are specified as the parsable strings in the MIB objects. and

in combination with other limitations as set forth in the independent claims. Claims 3-12, and 15-24 are allowed due to dependent claims.

7. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phuoc H. Nguyen whose telephone number is 571-272-3919. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3923. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Phuoc H Nguyen  
Examiner  
Art Unit 2143

December 23, 2005

  
**JEFFREY PWU**  
**PRIMARY EXAMINER**

Application/Control Number: 10/056,309

Page 13

Art Unit: 2143